

## Session 2: Discussion on “Reducing Foreclosures”

Paul Willen responded to the discussants' objections that likely endogeneity of house prices might have biased the results of the authors' regressions. He pointed out that when only keeping the debt-to-income (DTI) ratio as the dependent variable in the hazard model (and excluding prices), the authors still found that the DTI ratio forecasted very little. Furthermore, the bias would not derive from classical measurement error; since the DTI ratios at the top-end are under-measured and the DTI ratios on the bottom-end are over-measured, one would expect that the estimated coefficient would be biased upwards. Therefore, he claimed that the small estimated coefficient on the DTI variable was a substantial result.

Daron Acemoglu commented that he found the discussion around the results of the paper to be a bit misleading. When thinking of the welfare gains that might come from modifications, he pointed out that the social planner's aim will be to foreclose (modify) only when the benefits outweigh the costs of foreclosure (modification). The social planner necessarily must consider this problem in the context of asymmetric information, which is surely present between the parties involved. He claimed that securitization becomes relevant in how it changes the information sets; for example, a local loan officer has access to more information about a local borrower than a servicer from another location. Acemoglu believed that this shift of information sets is a very relevant path of exploration. In a related question, he asked for clarification on what the social objective is when considering foreclosures. In particular, it is unclear whether it is optimal to reduce foreclosures even when the borrowers are delinquent.

Ken Rogoff pointed out the parallel between the questions in this paper and those in the developing country debt literature. Just as this paper asks why there are not more loan modifications, the debt literature addresses the puzzle of why there were very few renegotiations in the face of unsustainable government debt. One set of answers had to do with government borrowers waiting for a “bailout” from large institutions such as the IMF or the US treasury. Rogoff thought that the same might occur in the mortgage market; in systematic crises, the prospect of a bailout might be a reason that lenders and borrowers delay renegotiation.

Geanakoplos suggested the the policy response of the government should be to reduce the principal of the subprime borrowers. Since 70% of disclosures are underwater subprime borrowers, he believed that a clear fix would be to write down the principal of these loans. Mankiw pointed out that since some of the subprime borrowers continue to pay, writing down their principals would result in a loss. Willen wondered how exactly the principal would be reduced in these cases. He said that the standard way it has been done is for the lender to accept whatever the house is sold for; this ends in very deflated prices and a clear opportunity for fraud. Therefore, there are methodological reasons for which it may not be optimal to reduce principals.

Benoit Mojon suggested another policy approach of imposing a maximum level of DTI ratio for borrowers. Even though he acknowledged the disagreement as to whether DTI is a determinant of default at the individual level, he believed that, from a macroeconomic perspective, there may be reasons to regulate the leverage in the economy. From the aggregate perspective, imposing a maximum level of DTI would have the benefit of cutting the link between asset prices and leverage. This might help prevent the dramatic unraveling that Geanakoplos had highlighted in his paper earlier in the conference.

Pablo Kurlat wondered how much local knowledge was necessary to renegotiate mortgages in some

way. In particular, he asked how much would be lost if a one-size-fits-all policy were used for renegotiation procedures.

Christopher Mayer claimed that 15% of all securitized loans made up half of all foreclosures. Since, under the pooling and service agreement, servicers are paid all their fees only when the foreclosure is filed in the case of a delinquent borrower, he believed that there is a strong incentive for the servicers to file for foreclosure. Willen disagreed. He claimed that the incentive structure of the pooling and service agreements is much less straightforward than Mayer asserted. Since the servicers are supposed to act in the interest of their investors, they would be in breach of contract if they foreclosed when they should have renegotiated.

Kristopher Gerardi revisited the concerns that the prices were taken as exogenous. He explained that the authors took advantage of cross-sectional variation, so that they looked at differences of house appreciation within towns and within time periods. He argued that this is exogenous from the borrower's perspective. When they put fixed town and time effects into a linear probability model, they do not see a change in their results, and find that about three-quarters of the variation of cumulative house price appreciation came from across borrowers within these time periods and locations. Thus, he concluded that their regression is identified.

Willen concluded by discussing the direction of causality between unemployment and foreclosures. He pointed out that there have been periods of high unemployment in the past during which foreclosures have not increased. He strongly believed that the decrease in house prices drove the foreclosures.